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DEFECT-FREE PATTERNING OF
SOL-GEL-COATED SUBSTRATES
FOR MAGNETIC RECORDING
MEDIA

ABSTRACT OF THE DISCLOSURE

A method of manufacturing a magnetic recording medium comprises steps of providing a non-magnetic substrate for a magnetic recording medium, the substrate including at least one major surface; forming a layer of a sol-gel on the at least one major surface; forming a pattern, e.g., a servo pattern in an exposed surface of the layer of said sol-gel; and converting the layer of sol-gel to a glass or glass-like layer while preserving the pattern in an exposed surface of said glass or glass-like layer. Embodiments of the invention include magnetic media including a patterned glass or glass-like layer formed from a layer of a hydrophilic sol-gel with the pattern embossed therein by means of a stamper having a hydrophilic surface including a negative image of the pattern.